

Claims:

1. A control system, **characterized** in that it comprises at least

5 — means (IR2) for setting up a short distance second data transmission connection (CH2) to a wireless communication device (MS) when it is within said distance, the connection being arranged for transmitting at least an identification message (MSG1) to said communication device, the message containing data (ID1) for identifying said control system (SS),

15 — means (RF2, TE2) for receiving messages via a communication channel (CC1, CC2, CC3) from a mobile communication network (PLMN) which is arranged to set up a wireless first data transmission connection (CH1) to said communication device for the transmission of messages and which communication network also comprises authentication means (AC) for identifying said communication device and allowing the transmission of messages, and

20 — processing means (CTRL2) at least for interpreting a control messages (MSG2) transmitted from said communication device and received via a communication channel, the message comprising at least data (CMD) for controlling the control system in a desired manner.

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30 2. The control system according to claim 1, **characterized** in that the authentication means (AC) are also arranged for adding data (ID2) identifying the communication device (MS) in the control message (MSG2).

35 3. The control system according to claim 1 or 2, **characterized** in that the control message (MSG2) contains at least the telephone number of the communication device (MS) that sent said control message, to identify said communication device.

4. The control system according to any of the claims 1 to 3, **characterized** in that the control message (MSG2) contains at least data (ID1) for identifying the control system for the transmission of the message.

5. The control system according to any of the claims 1 to 4, **characterized** in that it also comprises memory means (DB2) for storing at least one acceptable key code (KC1, KC2), and that in case the received control message (MSG2) also contains a key code (KC0), the processing means (CTRL2) are arranged to compare the key code of the control message with acceptable key codes, to allow or prevent the control.

6. The control system according to any of the claims 1 to 5, **characterized** in that

— it also comprises memory means (DB2) for storing at least one acceptable key code (KC1, KC2),

— as a result to the control message (MSG2), the processing means (CTRL2) are arranged to transmit an acknowledgment message (MSG4) via a communication channel (CC1, CC2, CC3) to the communication device (MS), the message comprising data (KC1, KC2) on acceptable key codes to be supplemented with a new control message (MSG2) to be transmitted from said communication device, and

— said new control message is arranged to be received via a second data transmission connection (CH2).

7. The control system according to any of the claims 1 to 6, **characterized** in that said means are also arranged to receive key messages (MSG3) transmitted from a server (SRV) via a communication channel (CC1, CC2, CC3), the message containing data (KC1, KC2) on

acceptable key codes for their storage in the control system (SS) for comparison.

8. The control system according to any of the claims 1 to 7, **characterized** in that the key message (MSG3) is arranged to be transmitted from a server (SRV) via a mobile communication network (PLMN) to a communication device (MS), the message containing data (KC1, KC2) on acceptable key codes for storing them in said communication device and adding them in the control message (MSG2) transmitted by said communication device.

9. The control system according to any of the claims 5 to 8, **characterized** in that the key code (KC0) contains at least data (ID2) identifying the communication device (MS) that transmitted the control message (MSG2).

10. The control system according to any of the claims 5 to 9, **characterized** in that the key code (KC0) contains at least the telephone number of the communication device (MS) that transmitted the control message (MSG2).

11. The control system according to any of the claims 1 to 10, **characterized** in that it also comprises control means (LS) for controlling the operation of the control system on the basis of the control message.

12. The control system according to any of the claims 1 to 11, **characterized** in that for setting up a communication channel (CC1, CC2, CC3), the control system (SS) also comprises means (RF2) for setting up a wireless third data transmission connection (CH3) to the mobile communication network (PLMN).

13. The control system according to any of the claims 1 to 12, **characterized** in that at least part of the messages (MSG2, MSG3, MSG4) are short messages to be transmitted in the mobile communication network (PLMN).

14. A wireless communication device for controlling a control system, **characterized** in that said communication device (MS) comprises at least

5 — means (RF1) for setting up a wireless first data transmission connection (CH1) to a mobile communication network (PLMN), the connection being arranged for transmitting and receiving messages,

10 — means (IR1) for setting up a short distance wireless second data transmission connection (CH2), the connection being arranged at least for receiving messages, and

15 — control means (CTRL1) for generating messages to be transmitted and for interpreting received messages, and memory means (SIM) for storing the messages,

**characterized** in that

20 — said means are arranged for receiving an identification message (MSG1) via the second connection from the control system (SS) when it is within said distance, the message containing data (ID1) for identifying said control system (SS), and

25 — said means are arranged for transmitting a control message (MSG2) via the first connection to said control system, the message containing data (CMD) for controlling said control system in a desired manner, wherein said mobile communication network also comprises authentication means (AC) for identifying said communication device and allowing the transmission of messages.

35 15. The wireless communication device according to claim 14, **characterized** in that said means are also arranged for receiving a key message (MSG3) via the mobile communication network (PLMN), the mes-

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sage containing data (KC1, KC2) on acceptable key codes for adding them in the control message (MSG2) transmitted by the communication device, and that said memory means (SIM) are arranged for storing said key codes.

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16. A control system, **characterized** in that it comprises at least

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— means (IR2) for setting up a short distance wireless second data transmission connection (CH2) to a wireless communication device (MS) when it is within said distance, the connection being arranged at least for receiving a control message (MSG2), the message containing at least data (CMD) for controlling the control system in a desired manner, and

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— processing means (CTRL2) for interpreting the control message transmitted from said communication device and received via the second data transmission connection.

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17. The control system according to claim 16, **characterized** in that it also comprises means (RF2, TE2) for receiving messages via a communication channel (CC1, CC2, CC3) from a mobile communication network (PLMN) which is arranged for setting up a wireless first data transmission connection (CH1) to said communication device for the transmission of messages, and that the processing means (CTRL2) are also arranged for interpreting the control message (MSG2) received via the communication channel.

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18. The control system according to claim 17, **characterized** in that said mobile communication network also comprises authentication means (AC) for identifying said communication device (MS) and for allowing the transmission of messages, and that the authentication means (AC) are also arranged for adding data (ID2) identifying said communication device (MS) into the control message (MSG2) to be transmitted.

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19. The control system according to any of the claims 16 to 18, **characterized** in that the control message (MSG2) contains at least the telephone number of the mobile communication device (MS) that transmitted the control message, to identify said communication device.

20. The control system according to any of the claims 16 to 19, **characterized** in that it also comprises memory means (DB2) for storing at least one acceptable key code (KC1, KC2), and that in case the received control message (MSG2) also contains a key code (KC0), the processing means (CTRL2) are arranged to compare the key code of the key message with the acceptable key codes, to allow or prevent the control.

21. The control system according to any of the claims 17 to 20, **characterized** in that

— it also comprises memory means (DB2) for storing at least one acceptable key code (KC1, KC2),

— as a result to the control message (MSG2), the processing means (CTRL2) are arranged to transmit an acknowledgement message (MSG4) via a communication channel (CC1, CC2, CC3) to the communication device (MS), the message containing data (KC1, KC2) on acceptable key codes to be added to a new control message (MSG2) to be transmitted from said communication device, and

— said new control message is arranged to be received via the second data transmission connection (CH2).

22. The control system according to any of the claims 17 to 21, **characterized** in that said means are arranged also for receiving key messages (MSG2) transmitted from a server (SRV) via a communication channel (CC1, CC2, CC3), the message containing data (KC1, KC2) on acceptable key codes for storing them in the control system (SS) for comparison.

23. The control system according to any of the claims 17 to 22, **characterized** in that the key message (MSG3) is arranged to be transmitted from a server (SRV) via a mobile communication network (PLMN) to the communication device (MS), the message containing data (KC1, KC2) on acceptable key codes for storing them in said communication device, and the mobile communication network being arranged for setting up a first data transmission connection (CH1) to said communication device for the transmission of messages.

24. The control system according to claim 22 or 23, **characterized** in that the server (SRV) also comprises memory means (DB1) for storing acceptable key codes (KC1, KC2), for storing data (ID1) identifying the security system to be controlled by each acceptable key code, and for storing data (ID2) identifying the communication device (MS) entitled to the acceptable key code.

25. The control system according to any of the claims 17 to 24, **characterized** in that as a response to the control message (MSG2) transmitted by the communication device (MS), the processing means (CTRL2) are arranged to transmit a message to said communication device regarding the transmission of a new control message (MSG2) via the second data transmission connection (CH2), the new control message containing at least an acceptable password.

26. The control system according to any of the claims 17 to 25, **characterized** in that

as a response to the control message (MSG2), the processing means (CTRL2) are arranged to transmit a key message (MSG3) via the mobile communication network (PLMN) to the communication device (MS), the message containing data (KC1, KC2) on acceptable key codes to be added to a new control message (MSG2) to be transmitted from said communication device, and

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said control message is arranged to be received via the second data transmission connection (CH2).

27. The control system according to any of the claims 17 to 26, **characterized** in that as a response to the control message (MSG2) transmitted by the communication device (MS), the control system (SS) is arranged to transmit a key message (MSG3) via the mobile communication network (PLMN) to another wireless communication device (MS), the message containing data (KC1, KC2) on acceptable key codes.

28. The control system according to any of the claims 20 to 27, **characterized** in that the key code (KC0) contains at least data (ID2) identifying the communication device (MS) that transmitted the control message (MSG2).

29. The control system according to any of the claims 20 to 28, **characterized** in that the key code (KC0) contains at least the telephone number of the communication device (MS) that transmitted the control message (MSG2).

30. The control system according to any of the claims 16 to 29, **characterized** in that it also comprises control means (LS) for controlling the operation of the control system on the basis of the control message.

31. A wireless communication device for controlling a control system, **characterized** in that said communication device (MS) comprises at least

— means (RF1) for setting up a wireless first data transmission connection (CH1) to a mobile communication network (PLMN), the connection being arranged for the transmission and reception of messages,



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means (IR1) for setting up a short distance wireless second data transmission connection (CH2) which is arranged at least for receiving messages, and

- 5 — control means (CTRL1) for generating messages to be transmitted and for interpreting received messages, and memory means (SIM) for storing messages,

**characterized** in that

- 10 — said means are arranged for transmitting a control message (MSG1) via the second connection to the control system (SS) when it is within said distance, the message containing data (CMD) for controlling said control system in a desired manner.
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32. The wireless communication device according to claim 31, **characterized** in that said means are also arranged for receiving a key message (MSG3) via the mobile communication network (PLMN), the message containing data (KC1, KC2) on acceptable key codes for adding them to a control message (MSG2) transmitted by the communication device, and that said memory means (SIM) are arranged for storing said key codes.

- 20 33. The wireless communication device according to claim 31 or 32, **characterized** in that said means are also arranged for transmitting key messages (MSG3) via the mobile communication network (PLMN) to another wireless communication device (MS), the message containing data (KC1, KC2) on acceptable key codes.

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